

**THIS OPINION WAS NOT WRITTEN FOR PUBLICATION**

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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***Ex parte*** PETER J. TWIST

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Appeal No. 1996-1675  
Application 08/317,977<sup>1</sup>

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ON BRIEF

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Before WINTERS, METZ and JOHN D. SMITH, **Administrative Patent Judges**.

METZ, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is an appeal under 35 U.S.C. § 134 from the examiner's refusal to allow claims 1 through 5, 7 through 10 and 12 through 18, all the claims remaining in this

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Application for patent filed October 4, 1994.

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application.<sup>2</sup>

Although appellant originally requested an oral hearing in this appeal (Paper Number 17), appellant has now waived his request for oral hearing (Paper Number 19). Accordingly, we shall decide the issues before us based solely on the arguments in appellant's brief and reply brief (Paper Numbers 12 and 14) and the examiner's answer (Paper Number 13) and the examiner's response to appellants' reply brief, such as it is (Paper Number 16).

#### **THE INVENTION**

The claimed invention is directed to aqueous compositions useful in color photography. The compositions are said to be useful as redox amplifiers and comprise, in particular amounts and at a particular pH, a color developing agent and hydrogen peroxide or a compound which provides hydrogen peroxide and an hydroxylamine or salt thereof. Appellant also claims the

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<sup>2</sup> Appellant's brief includes claim 6 in the appendix, "Claims on Appeal". Nevertheless, claim 6 was canceled by appellant in Paper Number 4. Accordingly, claim 6 forms no issue in this appeal.

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method of developing an imagewise exposed color photographic element by using appellant's compositions described above.

Claims 1 and 12 are reproduced below for a more facile understanding of the appealed subject matter.

1. An aqueous redox amplifier composition comprising a colour developing agent, hydrogen peroxide or a compound which provides hydrogen peroxide and hydroxylamine or a salt thereof wherein the concentration ranges are:

hydrogen peroxide from 0.5 to 10 ml/l (as 30% w/w solution),

hydroxylamine or a salt thereof from 0.25 to 5.5 g/l (as hydroxylamine sulphate), and

wherein the pH is in the range of from 11 to 12.

12. A method for processing an imagewise exposed color photographic element comprising contacting said element with an aqueous redox amplifier composition comprising a colour developing agent, hydrogen peroxide or a compound which provides hydrogen peroxide and hydroxylamine or a salt thereof wherein the concentration ranges are:

hydrogen peroxide from 0.5 to 10 ml/l (as 30% w/w solution),

hydroxylamine or a salt thereof from 0.25 to 5.5 g/l (as hydroxylamine sulphate), and

wherein the pH is in the range of from 11 to 12.

The references of record which are being relied on by the

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examiner as evidence of obviousness are:

Nakamura et al. (Nakamura)	4,414,305	November 8, 1983
Iwano	4,954,425	September 4, 1990

Claims 1 through 5, 7 through 10 and 12 through 18 stand rejected under 35 U.S.C. § 103 as being unpatentable from the disclosure of Nakamura or Nakamura considered with Iwano. We affirm.

#### **OPINION**

Our analysis of the issues presented for our determination begins with an analysis of appellant's claimed subject matter. As so-called "comprising" claims, the appealed claims do not exclude either unrecited or even undisclosed ingredients or steps. In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981). Accordingly, the claims embrace, but are not limited to, aqueous compositions which include an unidentified "colour developing agent", hydrogen peroxide or a compound which provides hydrogen peroxide and hydroxylamine or a salt thereof and wherein the peroxide or peroxide forming compound and the hydroxylamine or salt thereof are present in particular amounts. The pH of the aqueous compositions is in the range of from 11 to 12.

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Nakamura discloses aqueous compositions useful for developing imagewise exposed silver halide color photographic materials. The solution, denominated a "mono-bath type intensifying developing solution", includes hydrogen peroxide or a compound capable of releasing hydrogen peroxide and a color developing agent (column 3, lines 44 through 53). The ingredients which make up the developing solution are well-known and include buffering agents (column 12, lines 3 through 25); and, stabilizers for the peroxide (column 12, lines 26 through 48). The pH of the solution is within a range of from 7 to 14, preferably between 8 and 13 (column 12, lines 58 through 63). Hydroxylamine sulfate may be further added to the solution (column 13, lines 17 through 19). The intensifying solutions may contain a variety of other ingredients, including at least one developing agent, and other compounds known as components for developing solutions (column 17, line 29 through column 22, line 31). Example 1 describes an aqueous developing solution including hydroxylamine sulfate at a pH of 10.1 and an aqueous developing intensifying solution including hydrogen peroxide and a buffering agent at a pH of 11.0. Example 3 discloses an aqueous developing intensifying

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solution including a buffer and a hydrogen peroxide at a pH of 11.0.

Iwano discloses an aqueous monobath development-intensifying solution containing hydrogen peroxide or a compound which releases hydrogen peroxide and a color developing agent (column 3, lines 9 through 23; column 5, lines 64 through 68). The aqueous solution may be used in any one of known systems useful for performing monobath type color-intensifying processing (column 4, lines 49 through 54) and include coating development methods where a first solution containing a color-developing agent and second solution containing hydrogen peroxide or a compound which releases hydrogen peroxide may be used separately successively or the first and second solutions may be mixed to form a single solution followed by application of the single solution (column 5, lines 21 through 29). The pH of the monobath development-intensifying solution is 9 or higher, preferably from 10 to 12 (column 5, lines 61 through 63). Hydroxylamine sulfate is disclosed as an additive which may be further included in the development-intensifier solution (column 12, lines 3 through 5). A variety of other additives may be

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included in the aqueous compositions (column 13, line 42 through column 15, line 23), including buffering agents (column 15, lines 1 through 9). A developing intensifier including hydrogen peroxide, a buffering agent and having a pH of 11.0 is disclosed at column 18, lines 14 through 68 and column 20, lines 58 through 68.

We agree with the examiner's conclusion that Nakamura is evidence that the combination of a color developing agent, hydrogen peroxide and hydroxylamine sulfate is suggested by and therefore obvious from the disclosure of Nakamura alone or, Nakamura considered with Iwano. As specifically noted by the examiner, Nakamura discloses in two examples (Examples 1 and 3) an aqueous composition including hydrogen peroxide, a color developer and a buffering agent. The pH in Examples 1 and 3 of the developing-intensifying solution is 11.0. In light of Nakamura's express disclosure that compounds which make up known developing solutions may be added to the intensifying-developing solution and because hydroxylamine sulfate is specifically disclosed as a compound which may be further added to the aqueous solution, indeed it is present in both Examples 1 and 3, the person of ordinary skill in the art

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would have been motivated to add hydroxylamine sulfate to the intensifying-developer solution. The buffering agent would, by definition, be expected to maintain the pH of the intensifying-developer solution at 11.0, even with the further addition of hydroxylamine sulfate. Accordingly, there would have been a reasonable expectation of obtaining the pH claimed by appellant for his composition when following the express disclosure of Nakamura.

Further, Iwano expressly discloses that it is conventional in the art to combine color developer solutions with peroxide solutions to form a single solution for developing images. Accordingly, Iwano provides further motivation for combining the color developing solutions from Examples 1 and 3 of Nakamura with the developing- intensifying solutions in Examples 1 and 3 of Nakamura. Again, the presence of a buffering agent in the developing-intensifying solution would have provided a reasonable expectation to the routineer of obtaining a pH of 11.0 after the two solutions were combined.

Accordingly, for all the above reasons, we conclude that the examiner has established by a preponderance of evidence



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that the appealed subject matter would have been *prima facie* obvious to a person of ordinary skill in the art at the time appellant's invention was made.

Having concluded that the examiner has made out a prima facie case of obviousness with respect to the appealed subject matter, it is necessary for us to consider appellants' rebuttal evidence and to reconsider the prima facie case anew in light of all the evidence. In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984).

Appellant's evidence of non-obviousness comprises the examples in his specification and, more particularly, Example 5 on pages 14 through 16 of the specification. Appellant urges that the data therein establish the criticality of the pH in appellant's compositions and the critical relationship between hydroxylamine and hydrogen peroxide at a "critical pH." (see pages 4 and 5 of the reply brief).

Appellant, as the party asserting the claimed invention yields unexpected or improved results compared to the prior art, bears the burden of establishing the comparison is truly probative and that the argued results in the declaration are indeed unexpected or improved. In re Klosak, 455 F.2d 1077,

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1080, 173 USPQ 14, 16 (CCPA 1972). In re Hoch, 428 F.2d 1341, 1343, 1344, 166 USPQ 406, 409 (CCPA 1970).

In submitting evidence asserted to establish unexpected or improved results, there is also a burden on the party submitting the evidence to indicate how the proposed comparison claimed to represent their claimed invention is considered to relate to the examples intended to represent the prior art and, particularly, how the examples said to be representative of the prior art do, in fact, represent the scope of the prior art. See In re Borkowski, 505 F.2d 713, 718, 719, 184 USPQ 29, 33 (CCPA 1974); In re Goodman, 476 F.2d 1365, 1369, 177 USPQ 574, 577 (CCPA 1973). This appellant has not done concerning the specification examples.

The data in Table 9 at page 15 of the specification is described at page 14, lines 17 and 18 as being "based on DA4" but "made up with different hydroxylamine levels." The ingredients which make up "DA4" may be found at pages 13 and 14 of the specification. Although it would not be illogical for us to presume from said disclosure that the compositions

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set forth in Table 9 are identical to the composition of DA4 except for the amount of hydroxylamine sulfate and peroxide, that information is simply not set forth in appellant's specification. Likewise, although it would not be illogical for us to presume that each composition set forth in Table 9 which contains hydroxylamine sulfate has a pH of between 11 and 12 as required by the claims on appeal based on the presence in DA4 of a buffering agent, no pH's are set forth in Table 9 for any of the compositions. Since appellant's broadly disclosed pH range is from 10.5 to 12 (see page 3 of the specification, lines 5 through 7 and line 20), it is also possible that the pH's for the compositions in Table 9 are outside the claimed range of from 11 to 12. Nevertheless, as we have stated above, it is appellant's burden to explain how the data relied on as evidence of unexpected or surprising results is representative both of the scope of the prior art to which it is to be compared and the scope of the subject claimed by appellant. Appellant has simply not met his burden of persuasion.

Moreover, even assuming, *arguendo*, that the comparison being suggested were not subject to different interpretations,

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because of the scope of appellants' claims, the showing in the specification as filed is inadequate to overcome the prior art rejection because it is not representative of the scope of appellant's claims or the prior art. No claim on appeal is limited to the combination of the specific ingredients or steps described in Example 5 from the specification. Moreover, the example which is said to represent the prior art is not adequately set forth.

We have not overlooked the material submitted with appellant's brief and discussed at pages 16 through 20 of the main brief and pages 7 and 8 of the reply brief. However, 37 C.F.R. § 1.195 does not permit the submission of additional evidence after an appeal has been taken unless accompanied by a showing of good and sufficient reasons why the material was not earlier presented. No such showing of "good and sufficient reasons" is of record. Accordingly, we have not considered the James textbook for any reason in this appeal.

We have reconsidered the *prima facie* case anew in light of all the evidence. In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). However, for the reasons expressed above, we find the evidence from the specification

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to be inadequate to overcome the *prima facie* case.

Accordingly, the decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

The decision of the examiner is **AFFIRMED**.

**AFFIRMED**

SHERMAN D. WINTERS	)	
Administrative Patent Judge	)	
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	)	
ANDREW H. METZ	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
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	)	
JOHN D. SMITH	)	
Administrative Patent Judge	)	

AHM/gjh

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